

FIG. 1

DISK DRIVE OVERVIEW & COMPUTER INTERFACE

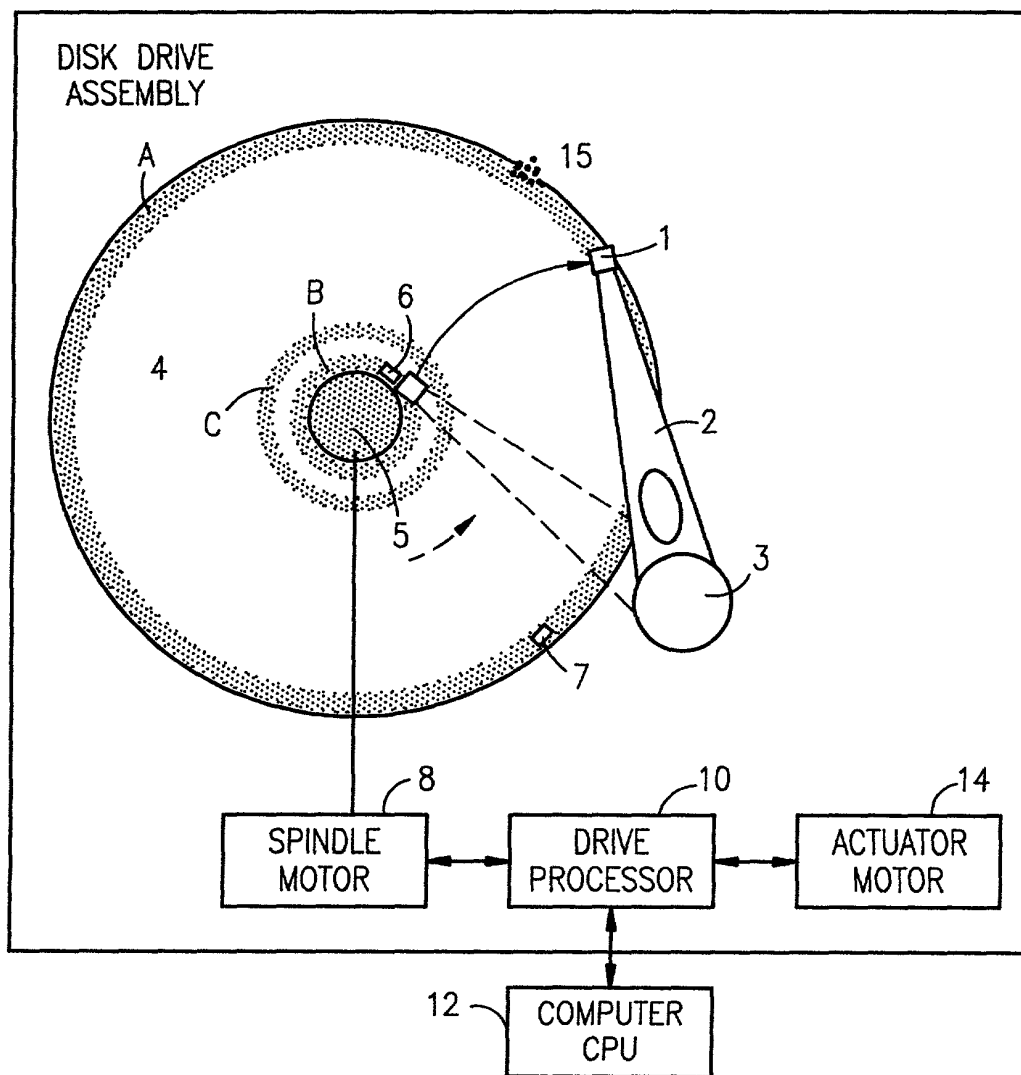


FIG. 2

DUAL ACCESS READ—NO LATENCY

TYPICAL DISK READ ACCESS

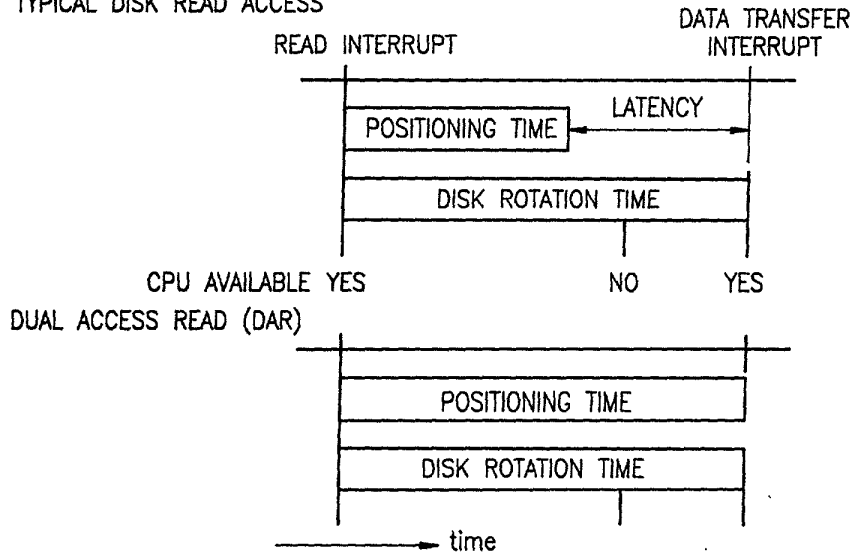
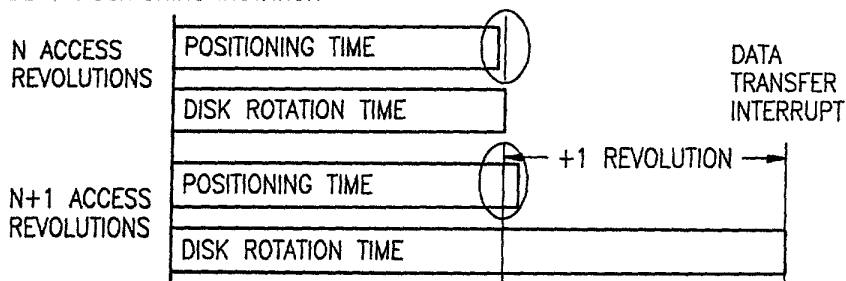


FIG. 3

AMPLIFYING POSITIONING VARIANCE—MEASURE REVOLUTION TIME

CASE 1 POSITIONING < ROTATION



CASE 2 POSITIONING > ROTATION

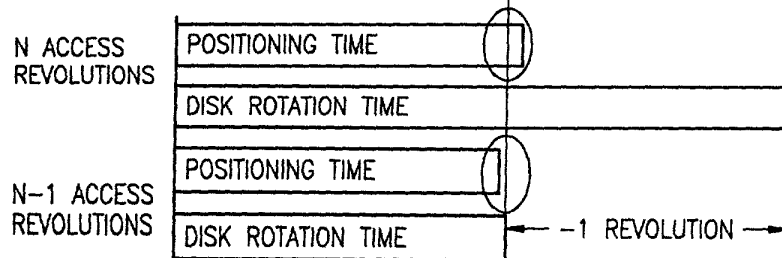
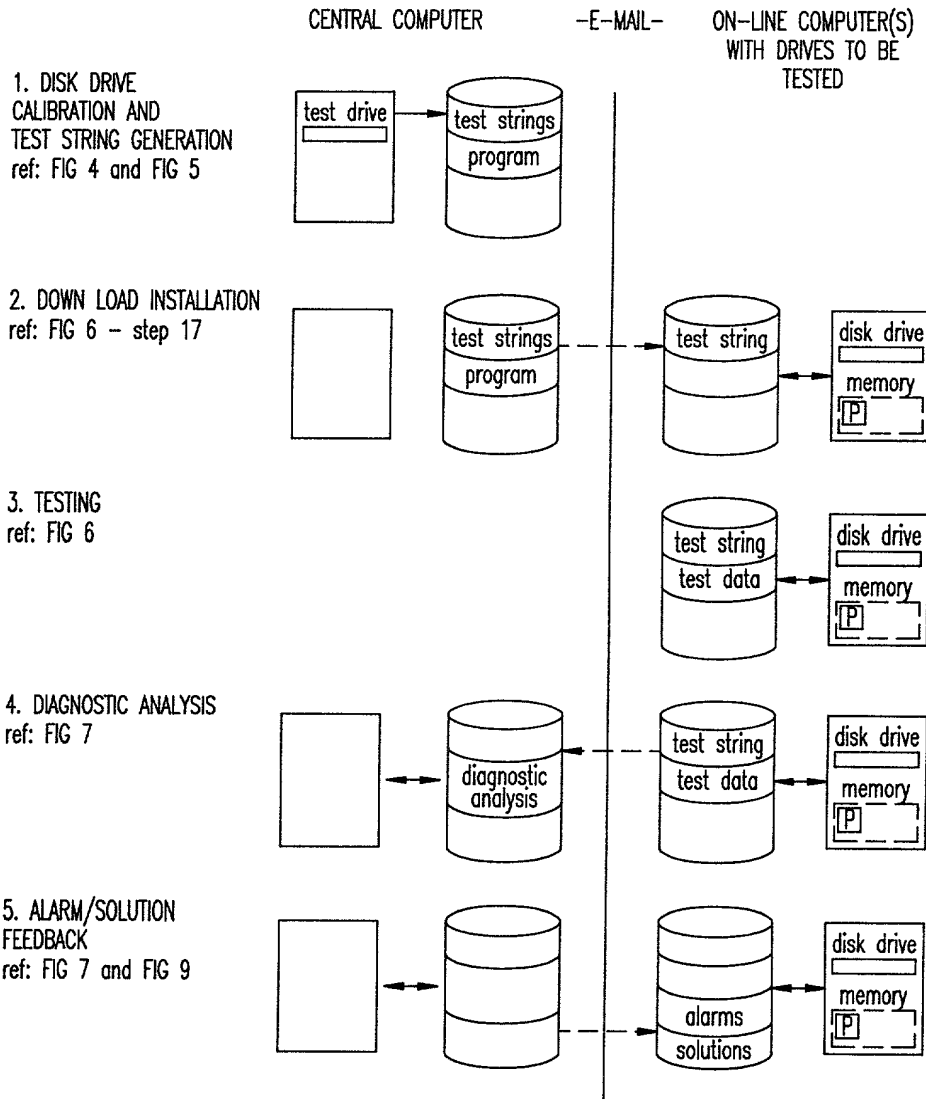


FIG. 3a PREFERRED EMBODIMENT

FOR PROVIDERS OF WARRANTY SERVICE AND
REPLACEMENT COMPUTER PRODUCTS



09839555-001401

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graph TD
    1[1. SET CALIBRATION PARAMETERS  
FOR ACCESS PATTERNS] --> 2[2. SELECT NEW  
"FROM" SECTOR]
    2 --> 3[3. CALCULATE APPROXIMATE  
"TO" SECTOR]
    3 --> 4[4. TEST READ  
"FROM" - "TO"]
    4 --> 6[(6. DAR  
TEST FILE)]
    6 --> 7{7. FILE  
FULL?}
    7 -- YES --> 8{8. DAR  
MIX OK?}
    7 -- NO --> 8B[8B. SELECT  
ADJACENT  
"TO" SECTOR]
    8B --> 3
    8 -- YES --> 8A{8A. TEST  
RPMS OK?}
    8 -- NO --> 8A1{8A. ADJACENT  
"TO" SECTOR  
AVAILABLE?}
    8A1 -- NO --> 2
    8A1 -- YES --> 8B
    8A -- YES --> 9[(9. DAR  
INVENTORY  
FILE)]
    9 --> 10{10. FILE  
FULL?}
    10 -- YES --> END([END])
    10 -- NO --> 2
    9 --> A((A))
    style A fill:none,stroke:none

```

FIG. 4

BUILDING DUAL ACCESS READ(DAR) INVENTORY
FOR "CREEP" AND "SWEEP" ACCESS PATTERNS

FIG. 4
BUILDING DUAL ACCESS READ(DAR) INVENTORY
FOR "CREEP" AND "SWEEP" ACCESS PATTERNS

FIG. 5

GENERATING AND CALIBRATING READ TEST STRINGS

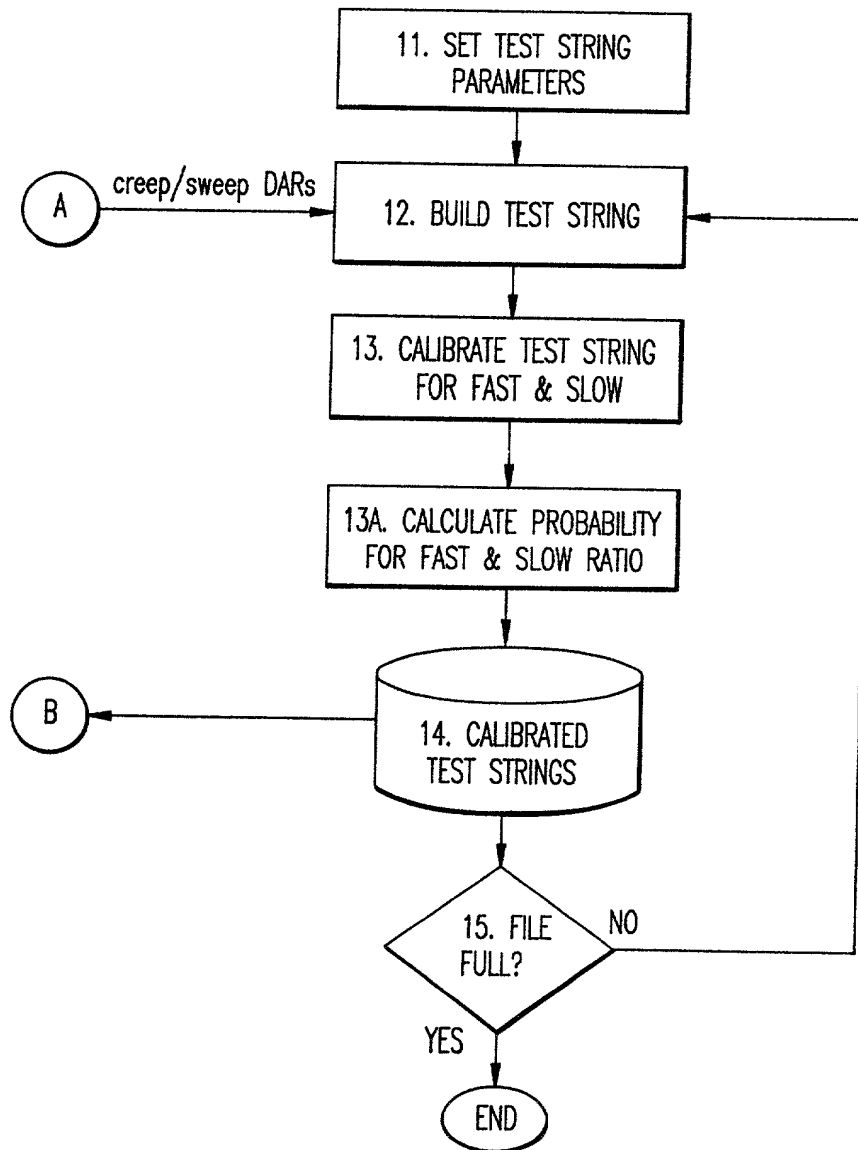


FIG. 6

TEST DATA ACQUISITION

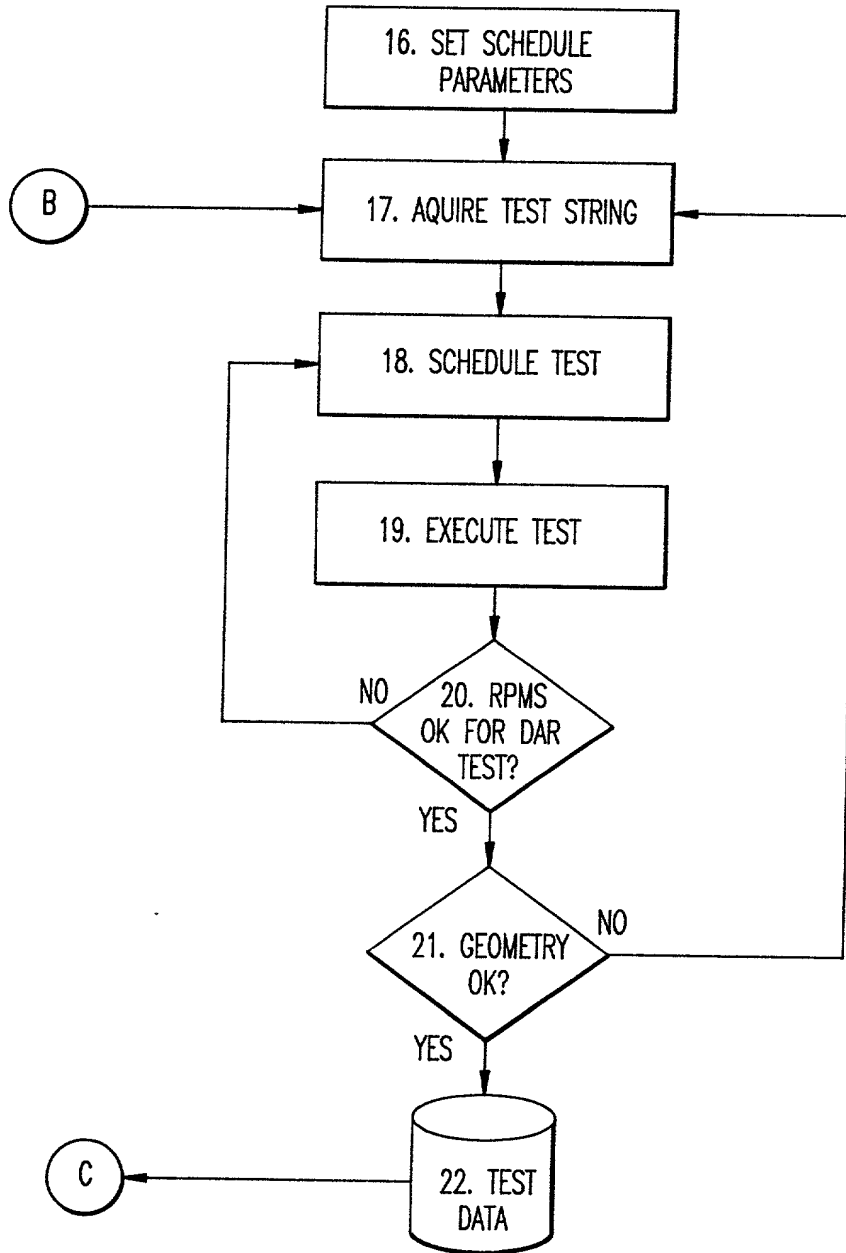
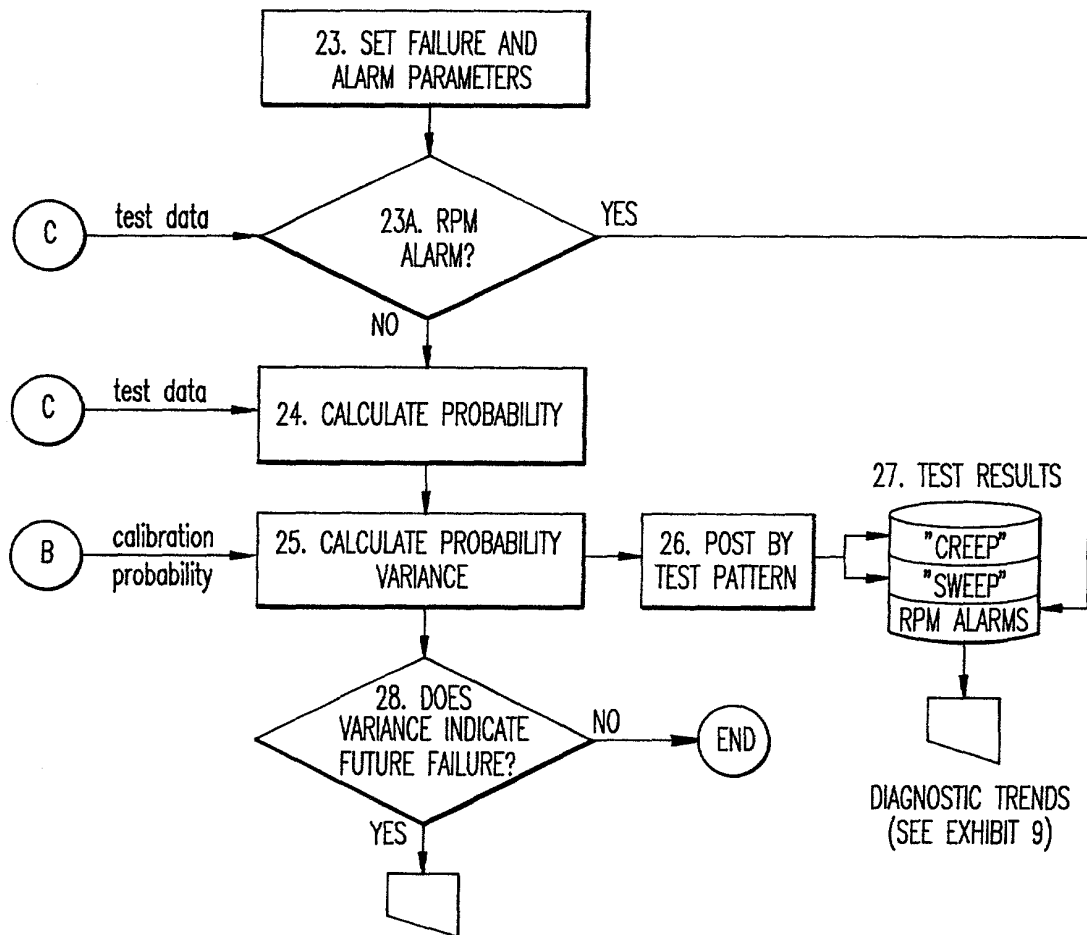


FIG. 7

TEST ANALYSIS AND FAULT SOLUTIONS



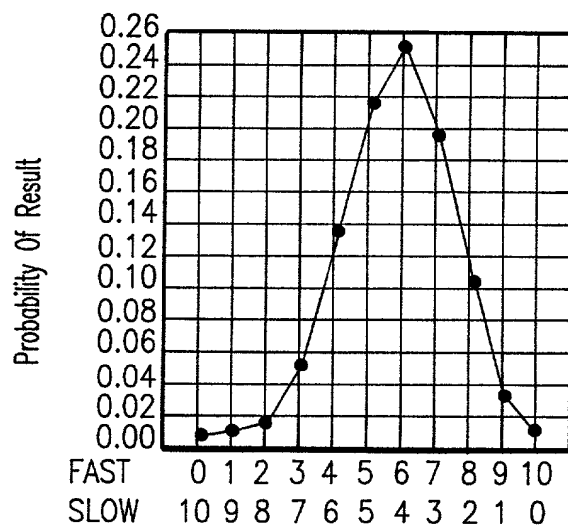
ALARMS & FAULT SOLUTIONS

- *Backup Files
- *Replace Drive
- *Inspect Drive At Computer Store
- *Replace Computer

093955.084401
"041180" 5856E860

FIG. 8

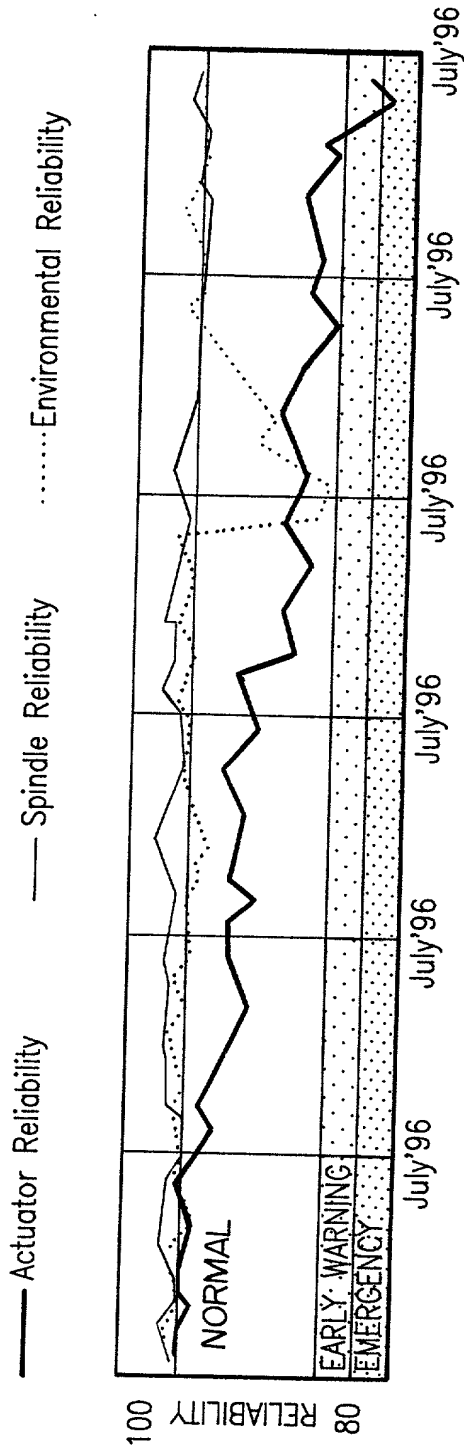
PROBABILITY OF 10-DAR MEASUREMENT
READ CALIBRATION: 58% FAST, 42% SLOW



The probability sum of the 11 possible outcomes is 100%

FIG. 9

DIAGNOSTIC DRIVE RELIABILITY TRENDS



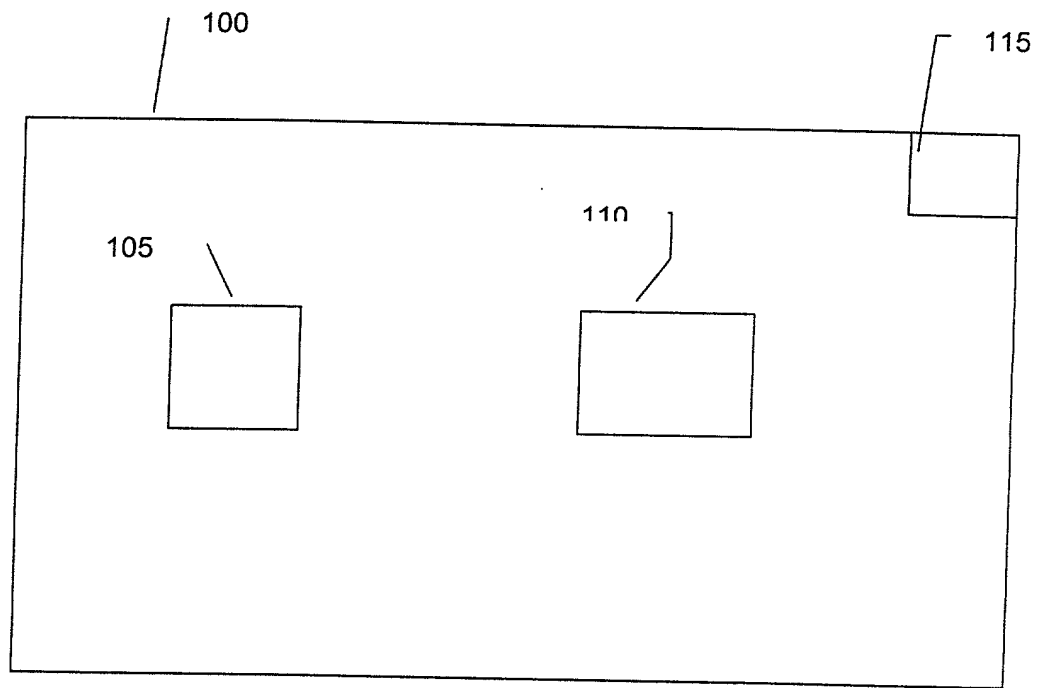


FIGURE 10

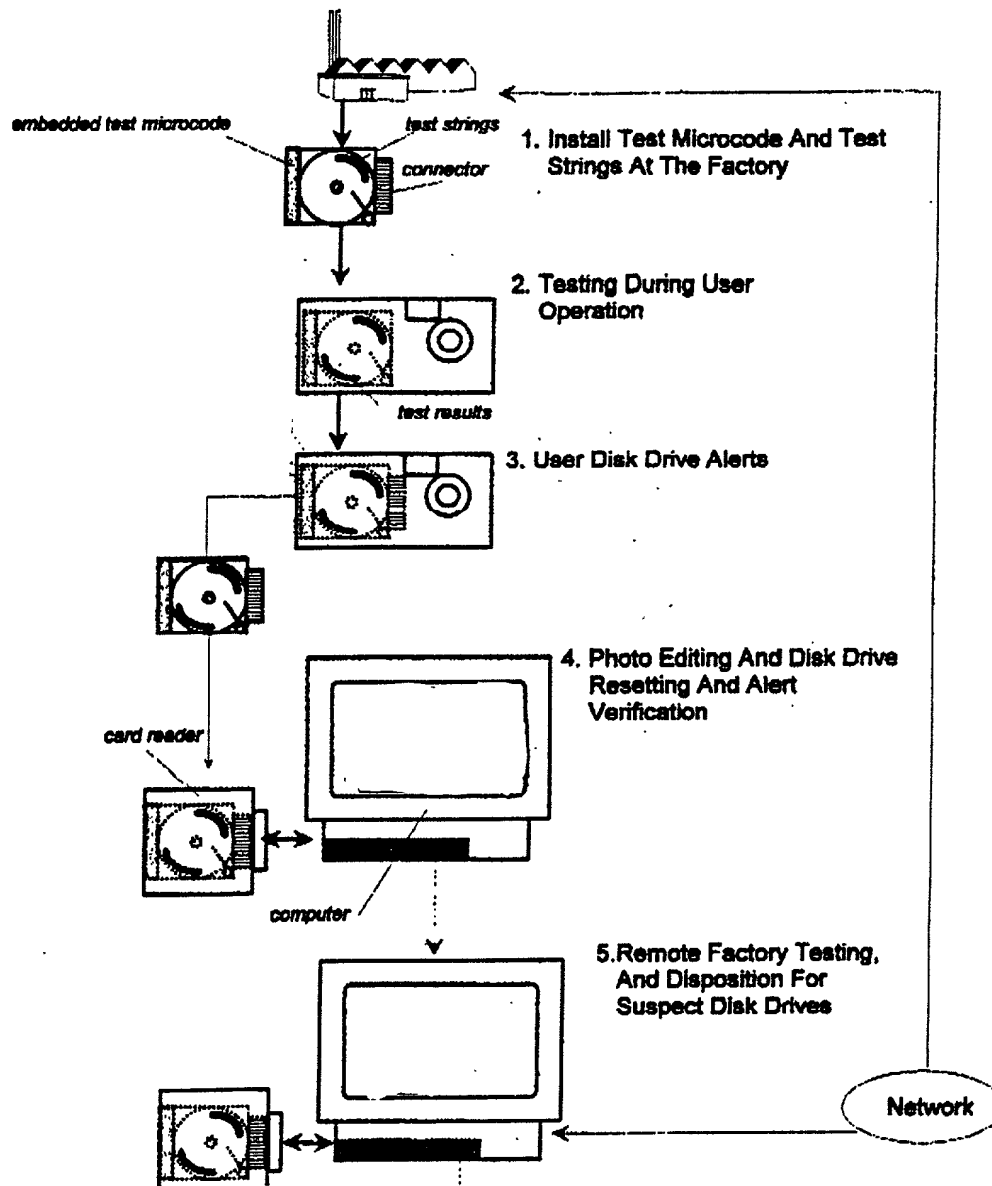


FIGURE 11

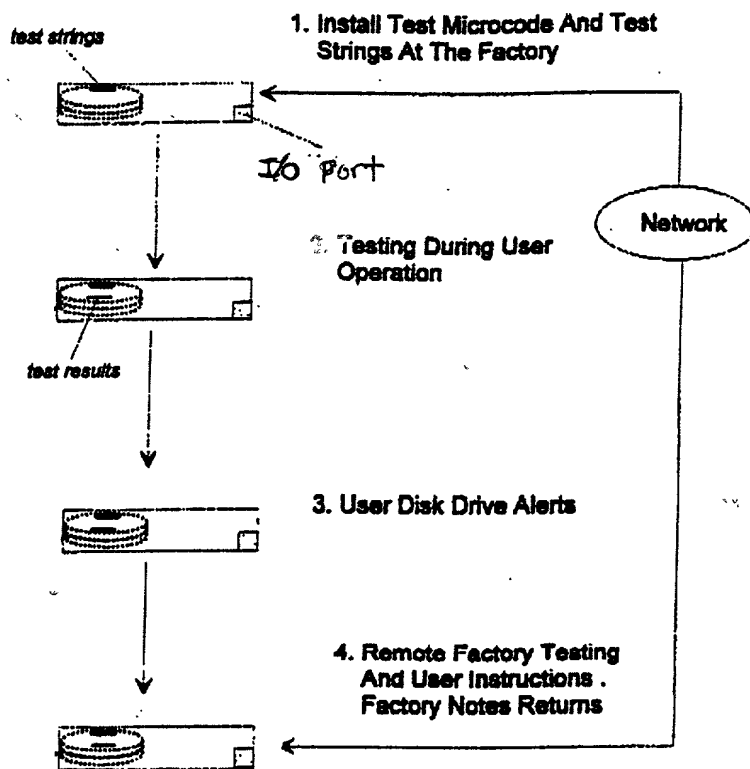


FIGURE 12